Comp. Biochem. Physiol. Vol. 134A, No. 4 pp. I–V, 2002

ELSEVIER

CONTENTS OF VOLUME 134

Vol. 134A No. 1

Appreciation list

In appreciation 1

General papers

N.I. Agalakova and G.P. Gusev 11 Effect of protein kinase C activation on Na^+–H^+ exchange in erythrocytes of frog *Rana temporaria*

C.-C. Prunescu, N. Serban-Parau, J.H. Brock, D.M. Vaughan and P. Prunescu 21 Liver and kidney structure and iron content in Romanian brown bears (*Ursus arctos*) before and after hibernation

C. Di Giulio, W. Huang, V. Waters, A. Mokashi, G. Bianchi, M. Cacchio, M.A. Macrì and S. Lahiri 27 Atrial natriuretic peptide stimulates cat carotid body chemoreceptors in vivo

V. Serrano-Pinto, C. Vazquez-Boucard and H. Villarreal-Colmenares 33 Yolk proteins during ovary and egg development of mature female freshwater crayfish (*Cherax quadricarinatus*)

R.M.G. Wells, J. Baldwin, R.S. Seymour, R.V. Baudinette, K. Christian and M.B. Bennett 45 Oxygen transport capacity in the air-breathing fish, *Megalops cyprinoides*: compensations for strenuous exercise

V. Bragigand and B. Berthet 55 Some methodological aspects of metallothionein evaluation

Ø. Ahlstrøm, E. Fuglei and L.T. Mydland 63 Comparative nutrient digestibility of arctic foxes (*Alopex lagopus*) on Svalbard and farm-raised blue foxes (*Alopex lagopus*)

J.M. Lawrence, L.R. Plank and A.L. Lawrence 69 The effect of feeding frequency on consumption of food, absorption efficiency, and gonad production in the sea urchin *Lytechinus variegatus*

V. Chapovetsky and U. Katz 77 Effects of season and temperature acclimation on electrocardiogram and heart rate of toads

J. Millán, C. Gortázar, F.J. Buenestado, P. Rodríguez, F.S. Tortosa and R. Villafuerte 85 Effects of a fiber-rich diet on physiology and survival of farm-reared red-legged partridges (*Alectoris rufa*)

D. Xiao and H.-R. Lin 93 Effects of cysteamine—a somatostatin-inhibiting agent—on serum growth hormone levels and growth in juvenile grass carp (*Ctenopharyngodon idellus*)

K.B. Armitage, D.T. Blumstein and B.C. Woods 101 Energetics of hibernating yellow-bellied marmots (*Marmota flaviventris*)

I. Takahashi, M. Shimada, T. Akimoto, T. Kishi and H. Sugi 115 Electron microscopic evidence for the thick filament interconnections associated with the catch state in the anterior byssal retractor muscle of *Mytilus edulis*

D. Medaković, R. Slapnik, S. Popović and B. Grželja 121 Mineralogy of shells from two freshwater snails *Belgrandiella fontinalis* and *B. kuesteri*

D.T. Booth 129 Composition and energy density of eggs from two species of freshwater turtle with twofold ranges in egg size

R.F. Nespolo, L.D. Bacigalupe and F. Bozinovic 139 The influence of heat increment of feeding on basal metabolic rate in *Phyllotis darwini* (Muridae)

J.E. Mellish and T.R. Loughlin 147 Lipoprotein lipase in lactating and neonatal northern fur seals: exploring physiological management of energetic conflicts

S.J. Cooke, E.C. Grant, J.F. Schreer, D.P. Philipp and A.L. Devries 157 Low temperature cardiac response to exhaustive exercise in fish with different levels of winter quiescence

Contents of volume

C.A. Hyndman, J.D. Kieffer and T.J. Benfey	167	The physiological response of diploid and triploid brook trout to exhaustive exercise
D. Seung-ho Shin, H. Ghai, S.W. Cain and L.T. Buck	181	Gap junctions do not underlie changes in whole-cell conductance in anoxic turtle brain
A.M. Beal	195	Response of the parotid gland of red kangaroos, *Macropus rufus*, to phenylephrine stimulation
T.G. Shelton and J.K. Grace	205	Cuticular permeability of two species of *Coptotermes* Wasmann (Isoptera: Rhinotermitidae)
Abstracts		
	213	Abstracts from the 13th Annual Meeting of the Japanese Society for Comparative Physiology and Biochemistry, Tsukuba, Japan, August 5–7, 2002
	I	Instructions to Authors

Vol. 134A, No. 2

Review article		
G.C. Packard and M.J. Packard	233	Natural freeze-tolerance in hatchling painted turtles?
General papers		
R. Ball, B. Xing, P. Bonner, J. Shearer and R.L. Cooper	247	Long-term in vitro maintenance of neuromuscular junction activity of *Drosophila* larvae
D.J. Marshall, R. Perissinotto and J.-F. Holley	257	Respiratory responses of the mysid *Gastrosaccus brevifissura* (Peracarida: Mysidacea), in relation to body size, temperature and salinity
S. Haider	267	Cyclic AMP level and phosphodiesterase activity during 17α,20β-dihydroxy-4-pregnen-3-one induction and theophylline inhibition of oocyte maturation in the catfish, *Clarias batrachus*
P.G. Greenwood, I.M. Balboni and C. Lohmann	275	A sea anemone's environment affects discharge of its isolated nematocysts
M.V. López-Calleja and F. Bozinovic	283	Dynamic energy and time budgets in hummingbirds: a study in *Sephanoides sephaniodes*
W.-N. Wang, A.-L. Wang, D.-M. Wang, L.-P. Wang, Y. Liu and R.-Y. Sun	297	Calcium, phosphorus and adenylate levels and Na^+–K^+-ATPase activities of prawn, *Macrobrachium nipponense*, during the moult cycle
A.D. Wright	307	GC-MS and NMR analysis of *Phyllidiella pustulosa* and one of its dietary sources, the sponge *Phakellia carduus*
F.-A. Weltzien, B. Norberg, J.V. Helvik, Ø. Andersen, P. Swanson and E. Andersson	315	Identification and localization of eight distinct hormone-producing cell types in the pituitary of male Atlantic halibut (*Hippoglossus hippoglossus* L.)
S. Asakuma, H. Morishita, T. Sugino, Y. Kurose, S. Kobayashi and Y. Terashima	329	Circulating leptin response to feeding and exogenous infusion of insulin in sheep exposed to thermoneutral and cold environments
S. Kirchner, S. Kaushik and S. Panserat	337	Effect of partial substitution of dietary protein by a single gluconeogenic dispensable amino acid on hepatic glucose metabolism in rainbow trout (*Oncorhynchus mykiss*)
K. Kitade, T. Nishita, M. Yamato, K. Sakamoto, A. Hagino, K. Katoh and Y. Obara	349	Expression and localization of carbonic anhydrase in bovine mammary gland and secretion in milk
U. Katz, J.-A. Lancaster and J.C. Ellory	355	Hypotonic-induced transport pathways in *Xenopus laevis* erythrocytes: taurine fluxes
S. Lowartz, R. Petkam, R. Renaud, F.W.H. Beamish, D.E. Kime, J. Raeside and J.F. Leatherland	365	Blood steroid profile and in vitro steroidogenesis by ovarian follicles and testis fragments of adult sea lamprey, *Petromyzon marinus*
D.A. Raftos, J. Robbins, R.A. Newton and S.V. Nair	377	A complement component C3a-like peptide stimulates chemotaxis by hemocytes from an invertebrate chordate—the tunicate *Pyura stolonifera*
C. Veloso, N.J. Place and G.J. Kenagy	387	Milk composition of free-living yellow-pine chipmunks (*Tamias amoenus*): temporal variation during lactation

P. Sabat and C. Veloso	393	Ontogenic development of intestinal disaccharidases in the precocial rodent *Octodon degus* (Octodontidae)
E.B. Metillo and D.A. Ritz	399	Differential chemosensory feeding behaviour by three co-occurring mysids (Crustacea, Mysidacea) from southeastern Tasmania
Y.S. Wang, R.J. Gonzalez, M.L. Patrick, M. Grosell, C. Zhang, Q. Feng, JiZeng Du, P.J. Walsh and C.M. Wood	409	Unusual physiology of scale-less carp, *Gymnocypris przewalskii*, in Lake Qinghai: a high altitude alkaline saline lake
R.M. Ortiz, C.E. Wade and C.L. Ortiz	423	Body water handling in response to hypertonic-saline induced diuresis in fasting northern elephant seal pups (*Mirounga angustirostris*)
K. Uchida, S. Kajimura, L.G. Riley, T. Hirano, K. Aida and E.G. Grau	429	Effects of fasting on growth hormone/insulin-like growth factor I axis in the tilapia, *Oreochromis mossambicus*
T.J. MacCormack, J.R. Treberg, V.M.F. Almeida-Val, A.L. Val and W.R. Driedzic	441	Mitochondrial K_{ATP} channels and sarcoplasmic reticulum influence cardiac force development under anoxia in the Amazonian armored catfish *Liposarcus pardalis*
G.M. Sant'Anna and J.P. Mortola	449	Thermal and respiratory control in young rats exposed to cold during postnatal development
Zh.P. Shuranova, Yu.M. Burmistrov and R.L. Cooper	461	Bioelectric field potentials of the ventilatory muscles in the crayfish
D. Pellegrino, R. Acierno and B. Tota	471	Control of cardiovascular function in the icefish *Chionodraco hamatus*: involvement of serotonin and nitric oxide
Erratum		
S.B. Mohamad, H. Nagasawa, Y. Uto and H. Hori	481	Erratum to "Tumor cell alpha-*N*-acetylgalactosaminidase activity and its involvement in GcMAF-related macrophage activation" [Comp. Biochem. Physiol. A 132 (2002) 1– 8]
	I	Instructions to Authors

Vol. 134A, No. 3

Review article		
G. Kartelija, M. Nedeljkovic and L. Radenovic	483	Photosensitive neurons in mollusks
General papers		
S. Meylan, A.M. Dufty and J. Clobert	497	The effect of transdermal corticosterone application on plasma corticosterone levels in pregnant *Lacerta vivipara*
G. García-Espinosa, L.A. Newberry, L.R. Berghman and B.M. Hargis	505	Differential cytoplasmic and whole cellular expression of histone H1 within the avian bursa of Fabricius
F. Zaidan, III	511	Variation in cottonmouth (*Agkistrodon piscivorus leucostoma*) resting metabolic rates
S.D. Roberts and M.D. Powell	525	Comparative ionic flux and gill mucous cell histochemistry: effects of salinity and disease status in Atlantic salmon (*Salmo salar* L.)
R. Stingele, H. Schnippering, E. Keller, T. Steiner and W. Hacke	539	Transcranial oximetry using fast near infrared spectroscopy can detect failure of collateral blood supply in humans
O.C.M. Pereira, M.S.P. Coneglian-Marise and D.C.C. Gerardin	545	Effects of neonatal clomiphene citrate on fertility and sexual behavior in male rats
Y. Dauphin and E. Dufour	551	Composition and properties of the soluble organic matrix of the otolith of a marine fish: *Gadus morhua* Linne, 1758 (Teleostei, Gadidae)
G. Piccione, G. Caola and R. Refinetti	563	Circadian rhythms of body temperature and liver function in fed and food-deprived goats
A. Balslev-Clausen, J.M. McCarthy and H.V. Carey	573	Hibernation reduces pancreatic amylase levels in ground squirrels
A. Sokolowski, M. Wolowicz and H. Hummel	579	Free amino acids in the clam *Macoma balthica* L. (Bivalvia, Mollusca) from brackish waters of the southern Baltic Sea

P. Cobbett and T.A. Day	593	Functional voltage-gated Ca^{2+} channels in muscle fibers of the platyhelminth *Dugesia tigrina*
J. Duan, L.B. Esberg, G. Ye, A.J. Borgerding, B.H. Ren, N.S. Aberle, P.N. Epstein and J. Ren	607	Influence of gender on ethanol-induced ventricular myocyte contractile depression in transgenic mice with cardiac overexpression of alcohol dehydrogenase
H. Fukada, Y. Fujiwara, T. Takahashi, N. Hiramatsu, C.V. Sullivan and A. Hara	615	Carp (*Cyprinus carpio*) vitellogenin: purification and development of a simultaneous chemiluminescent immunoassay
H. Ohtsu, K. Sato, H. Nishida and Y. Akiba	625	High β-hydroxybutyrate concentration in liver and skeletal muscle of newly hatched chicks
T. Sasanami, E. Atsumi, M. Toriyama and M. Mori	631	Asparagine-linked oligosaccharide-independent secretion of egg envelope glycoprotein ZPC of the Japanese quail (*Coturnix japonica*)
V. Anathy, S. Kirankumar and T.J. Pandian	639	Enhanced expression of β-thymosin mRNA in the ovary of GnRH analog or estradiol-17 β-treated paradise fish, *Macropodus opercularis*
A. Cremades, A. Sanchez-Capelo, A. Monserrat, F. Monserrat and R. Peñafiel	647	Effects of potassium deficiency on potassium, polyamines and amino acids in mouse tissues
N. Basu, C.J. Kennedy and G.K. Iwama	655	The effects of stress on the association between hsp70 and the glucocorticoid receptor in rainbow trout
A. Gandillet, E. Alexandre, V. Holl, C. Royer, P. Bischoff, J. Cinqualbre, P. Wolf, D. Jaeck and L. Richert	665	Hepatocyte ploidy in normal young rat
	I	Instructions to Authors

Vol. 134A, No. 4

General papers

P.W. Hochachka, C.-A. Darveau, R.D. Andrews and R.K. Suarez	675	Allometric cascade: a model for resolving body mass effects on metabolism
C. Atteke, A. Vetillard, A. Fostier, D.-H. Garnier, P. Jego and T. Bailhache	693	Effects of progesterone and estradiol on the reproductive axis in immature diploid and triploid rainbow trout
S. Davail, N. Rideau, G. Guy, J.-M. André, D. Hermier and R. Hoo-Paris	707	Hormonal and metabolic responses to overfeeding in three genotypes of ducks
M. Jefimow, M. Wojciechowski and E. Tęgowska	717	Daily variations in the influence of noradrenaline on preferred ambient temperature of the Siberian hamster
M. Grønning and G. Serck-Hanssen	727	Production of insulin-like growth factor binding-proteins by bovine adrenomedullary cells: differential regulation by IGF-I and dexamethasone
K.J. Brown and C.T. Downs	739	Digestive efficiency of a generalist avian feeder, the Cape White-eye (*Zosterops pallidus*)
E. Skadhauge, K.H. Erlwanger, S.D. Ruziwa, V. Dantzer, V.S. Elbrønd and J.P. Chamunorwa	749	Does the ostrich (*Struthio camelus*) coprodeum have the electrophysiological properties and microstructure of other birds?
A. Pirone, L. Betti, G. Mascia, G. Giannaccini, A. Lucacchini and O. Fabiani	757	Autoradiographic distribution of neuropeptide Y binding sites in the brain of the carp *Cyprinus carpio* L. (Cyprinidae, Teleostei)
M.D. McDonald, M. Grosell, C.M. Wood and P.J. Walsh	763	Branchial and renal handling of urea in the gulf toadfish, *Opsanus beta*: the effect of exogenous urea loading
T. Tachibana, M. Matsumoto, M. Furuse, S. Hasegawa, F. Yoshizawa and K. Sugahara	777	Central, but not peripheral, glucagon-like peptide-1 inhibits crop emptying in chicks
W. Cain, L. Song, G. Stephens and D. Usher	783	Characterization of lipoproteins from the turtle, *Trachemys scripta elegans*, in fasted and fed states
H. Asano, J. Bembenek and M. Takeda	795	Multiple forms of arylalkylamine *N*-acetyltransferase (NAT) from cockroach female colleterial glands and activity changes during oocyte maturation

K.L. Blair, T.G. Geary, S.K. Mensch, T.J. Vidmar, S.K. Li, N.F.H. Ho and D.P. Thompson	805	Biophysical characterization of a large conductance anion channel in hypodermal membranes of the gastrointestinal nematode, *Ascaris suum*
E.D. Thompson, G.D. Mayer, S. Balesaria, C.N. Glover, P.J. Walsh and C. Hogstrand	819	Physiology and endocrinology of zinc accumulation during the female squirrelfish reproductive cycle
A. Tamura, R. Akiyama, Y. Chiba, K. Moriya, E.M. Dzialowski, W.W. Burggren and H. Tazawa	829	Heart rate responses to cooling in emu hatchlings
S. Airaksinen, C.M.I. Råbergh, A. Lahti, A. Kaatrasalo, L. Sistonen and M. Nikinmaa	839	Stressor-dependent regulation of the heat shock response in zebrafish, *Danio rerio*
K. Evans, M.A. Hindell and D. Thiele	847	Body fat and condition in sperm whales, *Physeter macrocephalus*, from southern Australian waters
	I	Contents of Volume
	VII	Subject Index
	XI	Author Index
	XIII	Instructions to Authors